

# **DUNGOG TOWN RURAL RESIDENTIAL ENVIRONMENTAL STUDY**



**Dungog Shire Council**

**Localplan P/L**

This study was prepared by Localplan P/L for Planning Workshop Australia, with a contribution from Hunter Water. April 2009

# CONTENTS

Summary	4
Context	5
Background	5
Demand	6
Local Area Plans	7
Land Characteristics	8
Agricultural land	8
Ecology	8
Aboriginal culture	10
Bushfire	10
Flood	11
Landscape	11
Site Selection	12
Context	12
Demand	12
Constraints	12
Opportunities	12
Precincts	16
Blackboy Creek	18
Common Road	19
Tabbil Creek	20
Cangon Creek	21
Fosterton Road	22
Dungog East	23
Sugarloaf Road	24
Yield	25
Statutory	26
S. 117 Directions	26
SEPPs	28
Regional Plans	28
Conclusion	29



## SUMMARY

Context	Council's Rural Strategy identified considerable pent up demand for rural residential in the Shire. Moreover, with relatively slow population growth, and changes to the rural economy, there is an urgent need for additional population with off-farm income to prevent the further loss of services and employment in the Shire's villages and townships.
Land	The Rural Strategy identified some 8,000 hectares of land within which more detailed investigations and studies have identified land suitable for rural residential development. The Dungog Local Environmental Plan has been amended accordingly. However, land around Dungog was largely deferred from this investigation.
Area	This study proposes to re-zone 370 hectares of land for Rural Living in three locations and 25 hectares for Rural Enterprise in two other locations.
Study	The draft Shire Strategy has confirmed the overall scale of demand and this Environmental Study underpinning the proposals has been prepared in consultation with the Dungog Council, some government agencies and community representatives.
Outcome	Need has been assessed on the basis of historic data modified by overspill and pent up demand. Rigorous criteria have been used to identify only the most suitable land for rural residential.

# CONTEXT

## Background

Context	Despite growing demand, Dungog's population is growing slowly. Changes to agricultural practice, and a significant proportion of dwellings being used as week-enders, mean that local businesses and services are at risk. The community sees a major opportunity to provide for the demand for rural residential development to assist in maintaining the viability of its economic base. However, it is not prepared to do this at the expense of the environment or agricultural practice. Impetus has been given to demand by the construction of the Tilligra dam.
Rural Living Zone	The most suitable land for rural residential is to be zoned Rural Living, which allows a limited range of housing and uses compatible with a normal residential area. There are strict controls on density, lot size, public health, and a number of amenity and environmental issues.
Rural Enterprise Zone	Some such land is to be re-zoned for Rural Enterprise. This maintains the subdivision standards but relaxes the controls over use and amenity to some extent. This allows people to live in a rural setting and undertake economic activities which would not normally occur near other dwellings. It is proposed to provide for a Rural Enterprise zone in association with an existing employment zone.
Specialist Studies	Funds have not been made available for there to be extensive specialist environmental studies into aspects such as ecology, flooding, or landscape. As a result extremely conservative elimination criteria have been used. These are set out in the methodology, site evaluation and land characteristic sections which follow later.

Robustness	However, in the unlikely event that some constrained land is zoned for development, it is to be noted that the detailed studies, required before development approval is granted, will pick this up and the results used to modify or constrain the proposal.
Methodology	This environmental study identified land with constraints to development. These are shown in outline in the constraint maps. The methodology was an initial inspection of topographic maps and aerial photographs. This was followed up by ground truthing every site and assessing its potential for development or otherwise.
Site Evaluation	<p>General land characteristics are described later, but the aspects which were used to identify the preferred future zoning, were land:</p> <ul style="list-style-type: none"> <li>• with significant vegetation, including re-growth, either in a large area or adjacent to similar vegetation which could pose a bushfire risk;</li> <li>• which floods, interpolated from contours where studies were not available, or is within 100 m of a river bank;</li> <li>• prominent in the rural landscape or too steep for extensive development;</li> <li>• with significant access problems, relatively remote from the settlement;</li> <li>• close to existing uses of potential nuisance;</li> <li>• in large viable agricultural holdings.</li> </ul>

### Demand

There is very considerable pent up demand for rural residential development in the Shire. This is partly because subdivision was effectively frozen for a number of years and partly because rural residential development in nearby Councils, such as Maitland and Port Stephens, appears to be reaching saturation. This makes estimates of demand difficult.

Estimates An estimate has been made of the possible demand for the 20 year period to the year 2031. It is based on twice the rural dwelling approvals around each settlement for the decade between 1992 and 2002 and on population forecasts.

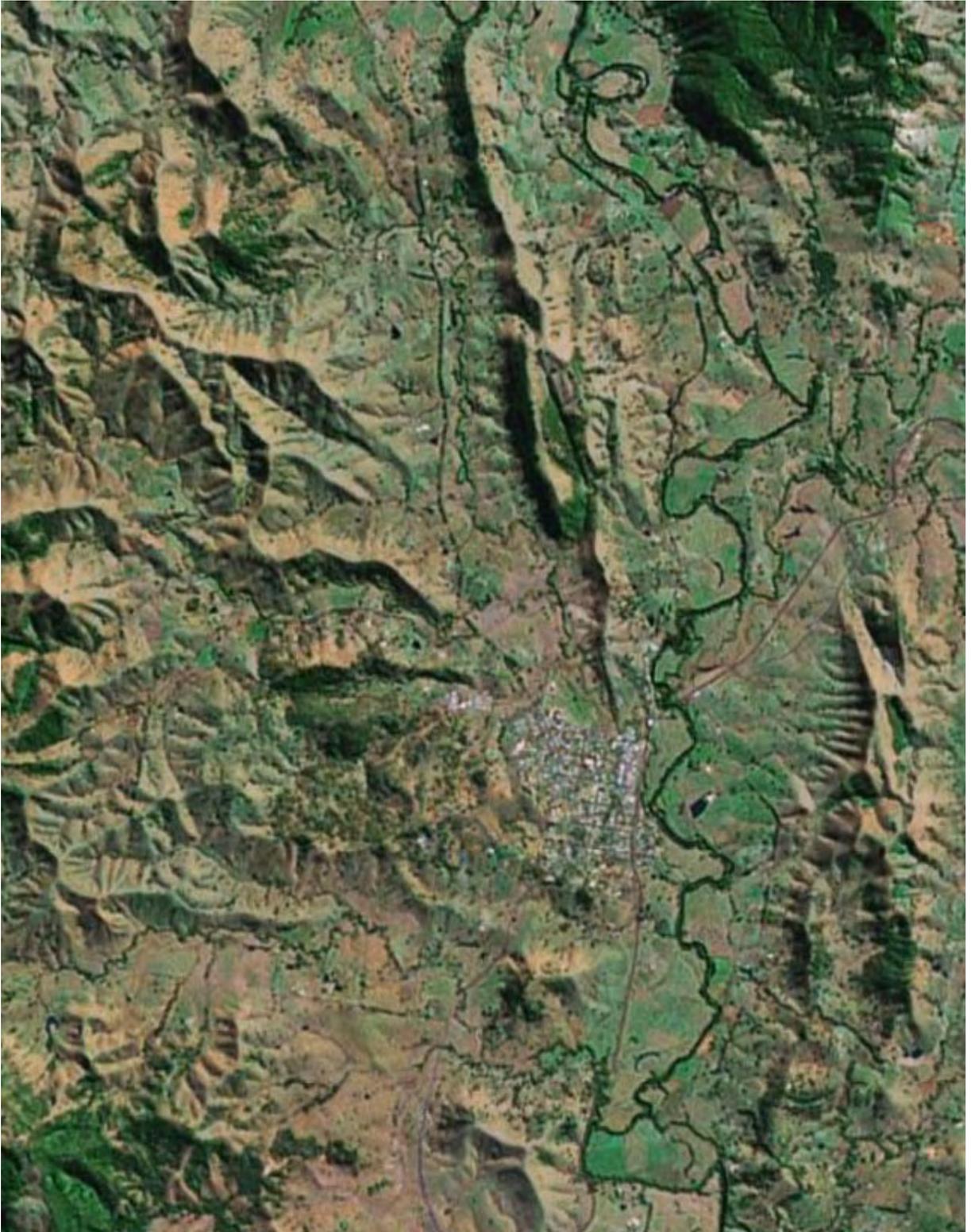
Discrepancy However, there appears to be a discrepancy between the rate at which approvals are given for rural dwellings and the rate at which they are being built, which could be only 75%. It is uncertain why this should be so, but it might be that people are getting their approvals and then building a garage or shed which they live in, or week-end in, until such time as they can or want to build, which might be decades later. If so, presumably it means that the land demand is real.

Outcome If the demand estimates are significantly optimistic, it means that a number of smaller properties will not be subdivided. If they prove correct, or conservative, then more land will be re-zoned following the regular reviews.

### Local Area Plans

Controls The current Local Area Plans, which are part of the Shire wide Development Control Plan, relate to all the settlements in the Shire except Dungog.

Assessment A Dungog Town Local Area Plan will be prepared which includes those which this study proposes for Rural Lifestyle, or Rural Enterprise. It is to be noted that this Plan will provide a detailed assessment of planning requirements for every property on a site-by-site basis. This represents a significant augmentation and justification to the proposals set out in this Study.



**Dungog Town and surrounding area**

# LAND CHARACTERISTICS

## Agricultural Land

Shire total                      The question of agricultural land value and holding size has been taken into account, but not used as an absolute determining factor, save the need to retain some high land in association with the highly productive river flats. It is estimated that there are 150,000 hectares of agricultural land in the Shire of which 40% is Class 2 or 3 agricultural land suitability.

Land take                        As a result of this Study it is estimated that in the long term up to 400 hectares might be used for new rural residential. None of it will be Class 2 and some will be Class 4, but the vast majority is Class 3 agricultural land. The agricultural value of land in rural residential areas has not been determined. There will be some domestic use for vegetable gardens, orchard and small scale livestock. Theoretically it is capable of far more intensive yield than pasture.

Impact                            On the basis that the 60% Class 4 or 5 land in the Shire has half the yield of the Class 2 or 3 land, then the effective Class 3 productive land of the Shire is 105,000 hectares. Assuming the rural residential yield is nil, then 400 hectares is about 0.4 % of the current agricultural output of the Shire over 20 years, which is negligible when compared other changes in the rural sector.

## Ecology

Vegetation                      Prior to European settlement the vegetation of Dungog Shire was mostly of the Eucalyptus Tall Woodland sub-Formation much of which has been cleared for agriculture or modified by forestry and grazing practices. The trees range in height from 20 - 30 m tall, shrubs are few, but a grassy ground cover is present.

Canopy species are mostly Eucalypts, but broad leafed ironbarks and other trees are present particularly along the streams. Ground covers include sedges and bracken fern in the moister areas, grading into grasses where drier. Rainforest species may be found in sheltered areas and intrude into the Tall Woodlands as an understory.

#### Flora

A number of vegetation types have been identified including:

- Hunter Valley Moist Forest;
- Seaham Spotted Gum Iron Bark Forest;
- Lower hunter Spotted Gum – Ironbark Forest; and
- River-flat Eucalypt Forest.

#### Fauna

A number of rare and endangered fauna species have been sighted in the area including:

- koalas;
- phasocogales;
- broadnose bats; and
- sooty owls.

#### Detailed studies

Resources have not permitted a detailed analysis of the prevalence of specific flora or fauna assemblages within the Study area. Moreover, most detail studies have been undertaken to support development applications and, as required, have concentrated on the identification of endangered species rather than the broader environmental and ecological impact.

#### Precautionary Principle

In the absence of site detailed studies, a conservative, indeed conservationist, approach has been taken. In practice all of the land selected for development is, or has been, used for agricultural purposes and, except along drainage lines, is virtually clear of native vegetation.

Flexibility                    There will be some flexibility to extend the boundaries of those areas, which are sensitive but have not been zoned for other purposes, depending on detailed studies by the proponent when proposing a rural subdivision.

### Aboriginal Culture

Concentrations            It would seem that the area was relatively densely populated at the time of European settlement and that there were bands of people living in the area. The land is currently within the Karuah Aboriginal Land Council Area. Population levels would have been determined by available food resources, and these would be more plentiful near rivers. It is to be anticipated, therefore, that artifacts are more likely to be found on river terraces and ridges overlooking the rivers, although very few have been found in the area to date. Research suggests that artifacts will be concentrated within 100 metres of rivers.

Riparian Areas            No land within 100 metres of rivers is proposed to be re-zoned for development purposes. It is not practical, or financially feasible, to undertake detailed archaeological surveys at this stage, when the scale, timing and location of development is unknown. They will be required to be done in relation to specific development proposals at the subdivision and construction stage.

### Bushfire

Requirements            The Dungog Local Environmental Plan 2006 has stringent requirements in relation to bushfire threats and these provisions will apply to all land zoned for development as a result of this Study. The Shire has a detailed Bushfire Prone Land Map which categorises the threats in some detail. Generally speaking these relate to vegetated land which has been excluded from development on ecological grounds in any event.



### **Bushfire prone and buffer areas**

#### **Controls**

As a result, whilst there is some land proposed for development on land classified as within the Vegetation Category 2, any subdivision proposal should easily be able to comply with the bushfire standards.

#### **Flood**

#### **Information**

Flood information is not available for the creeks and drainage lines within the study area. However, because development is prohibited within 40 metres of significant creeks and all development proposals will be subject to riparian controls under the Rivers and Foreshores Act, each proposal can be treated on its merits at subdivision stage.

#### **Management**

So that there may be management advantages of including riparian land within individual lots, unless community title is proposed and this is considered a better option in the circumstances.

## Landscape

Areas which are prominent in the rural landscape were assessed using a combination of on-site inspection and topographic contour interpretation. In most circumstances there is a clear demarcation at the point where the slope of the hillside changes significantly and land above this change-in-slope point has been excluded.

This is when the lower, flatter land meets hill slopes of greater than 1 : 5 or 12°. Whilst the cut-off for development on slopes 18° in the Dungog Local Environmental Plan, but this is for dwellings. A normal maximum for residential roads is 10°. So the visual landscape constraint in Dungog usually coincides with practical construction restrictions.

In addition to this there are a number of areas where the community has identified important landscape qualities, often along river valleys but sometimes on the approaches to settlements, where it would be preferable to constrain further development. This has also been taken into account.

## **SITE SELECTION**

### Context.

Opportunities around Dungog are constrained by the rich agricultural flats of the William's River to the east and Myall Creek to the north, together with high broken country north, west and south. At the same time the community have put considerable emphasis on preserving areas of high scenic value, and in particular the approaches to the township.



**Collector Roads**

## Demand.

The current population of the township is around 2000 people with, in addition, perhaps half that number living in the surrounding rural areas. Between 1992 and 2002 there were 130 approvals granted for the erection of dwellings in the rural area, so the demand is substantial. This is likely to increase with the growth of Maitland. A more complex calculation based on population forecasts, suggests an increase of 250 to 350 small rural dwellings, bearing in mind that likely changes to the Local Environmental Plan would restrict rural dwellings, transferring much of the demand to small rural.

Given severe restrictions on supply, possible demand for the period to 2031 might be at least 250 and up to 350 rural dwellings.

## Constraints and opportunities

### East

There are large agricultural holdings to the east, most of which include river flats of high agricultural value, should not be subdivided but retained for farming purposes. In practice this rules out all the land east of the Williams River.

To the west of Fosterton Road there is an opportunity for some development on fragmented land on the lower slopes of the ridge. Between the railway and the river on the south-east edge of Dungog, there is a small parcel of land which could be used for Rural Enterprise.

### North

Similarly the land east of Chichester Road, as far as the hill country on the other side of Myall Creek, is unsuitable.

Most of the country to the west Chichester Road is too steep and broken for development. However, there are opportunities in the foothills up Blackboy Creek to the west of the Chichester Road.

To the north-west there is land south of Sugarloaf Road, most of which has been subdivided into smallholdings which might possibly be developed more closely as they are highly accessible to Dungog.

West

An opportunity exists for Rural Enterprise zones between Common Road and Common Creek on either side of an existing light industrial estate. The eastern site offers a buffer between the industry and the residential area further east. However, the western site might possibly be used for significant industrial/storage buildings and needs to be reserved for this purpose.

Most of the land to the west of town is either Common Land or already zoned and developed for rural residential.

South

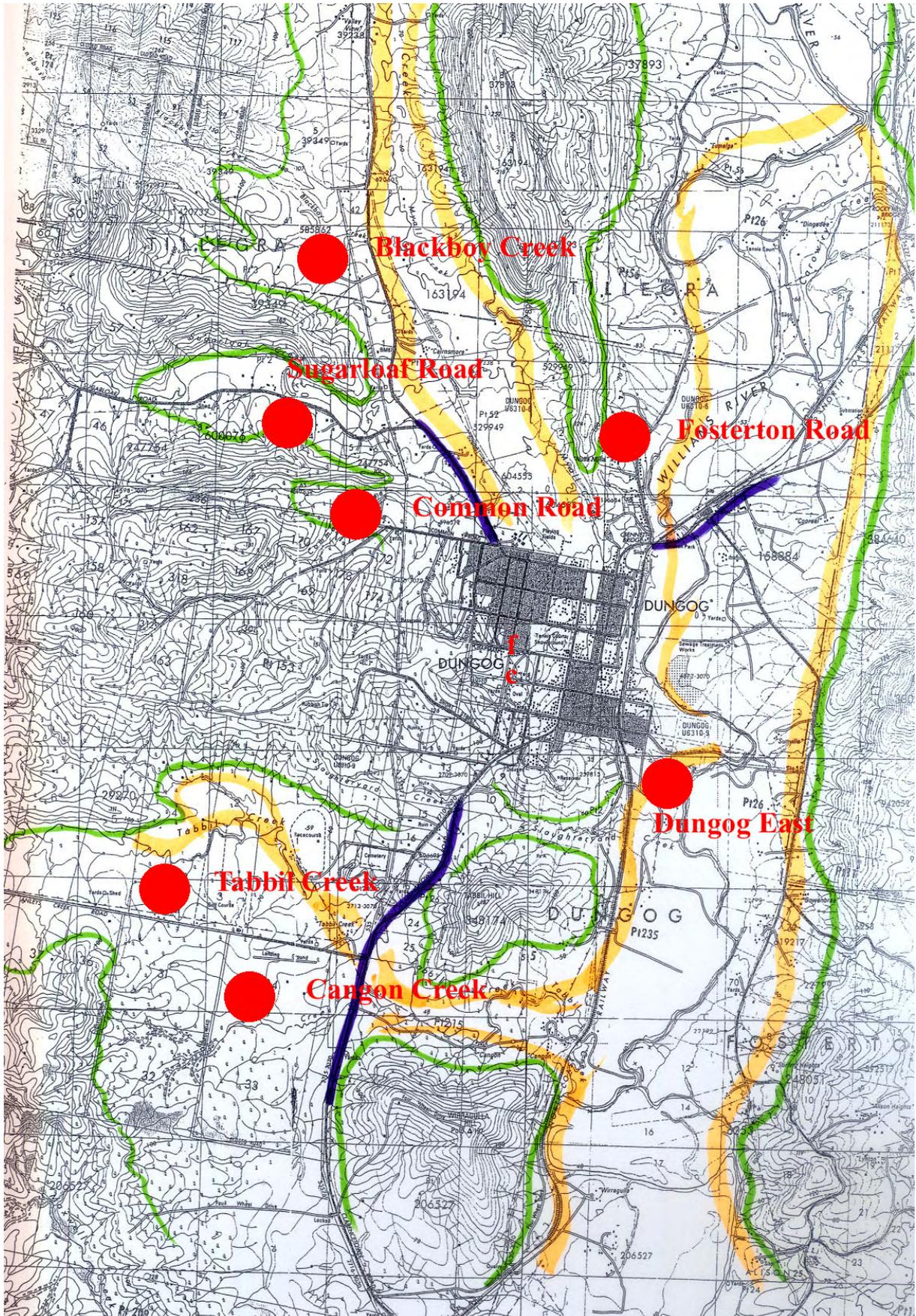
East of the Clarence Town Road is mainly hill country and an important rural view approach to the township.

However, land adjacent to Hanley's Creek Road offers significant opportunities provided the rural aspect of the view from Clarence Town Road is not unduly impaired.

There are a number of properties on the north side of the road beyond the crest of a ridge, and on either side of the golf course, which are suitable.

There is also an opportunity to develop a significant property on the south side of the road. This had already been subdivided into 60 hectares parcels but is still all in one ownership. An integrated themed equestrian estate is proposed together with a conference centre and other ancillary facilities.

# MAP OF CONSTRAINTS AND OPPORTUNITIES



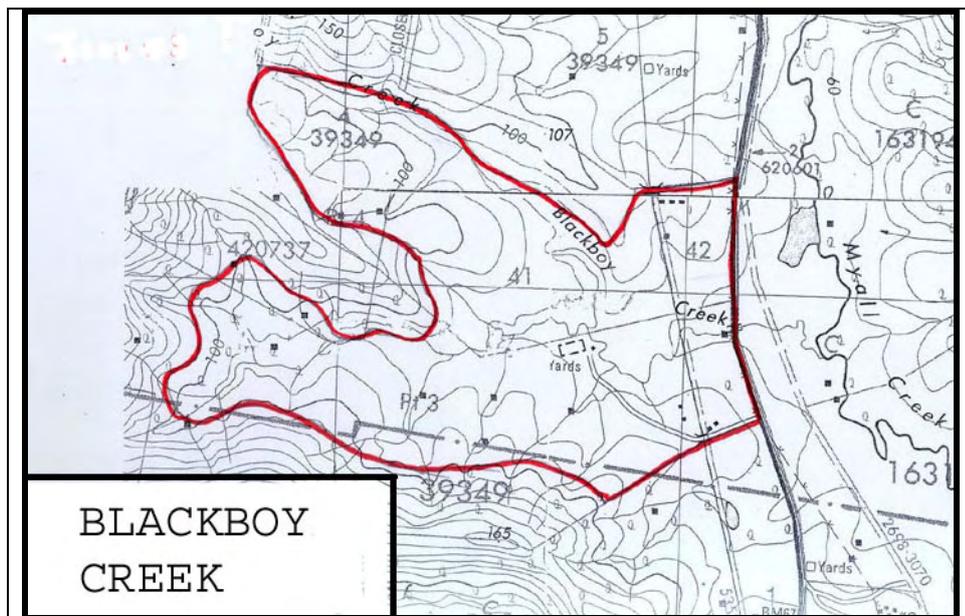
## A Blackboy Creek

All of this land is proposed to be zoned 1(l) for Rural Lifestyle.

This is an area on the west side of Chichester Road two to three kilometres north of the existing urban development. Prominent ridges mark the northern and southern boundaries. It has views over the Myall Creek but, with landscaping, can be relatively hidden from Chichester Road. However, care needs to be taken to ensure that an image of ribbon rural development along the road is not created.

It is some 100 hectares in extent but if further development were to take place, there is another valley a kilometre or so to the north. The land is fragmented into four parcels limiting its agricultural value.

It is near to urban services but although access off Chichester Road is relatively easy, it will be necessary to cross the water pipeline to the dam, which could be a cost constraint.



## B Common Road

The area is on the northern side of Common Road, on either side of the existing industrial estate forming part of the Dungog urban area. It is some 30 hectares in extent made up of a parcel of 15 hectares and part of a 40 hectare parcel on mostly difficult land.

The eastern half of this land is proposed to be zoned 1(e) for Rural Enterprise. The western half may be needed for industrial purposes later, so is not proposed for Rural Enterprise at this stage.

The eastern area has been the subject of an application to be re-zoned for industrial purposes, but, following community concern, the applicant proposes Rural Enterprise. The property also includes land on the north side of Common Creek, which will not be used for development but will be included in the development entitlement.

There is no reason why lots should not have direct access to Common Road. There may be a need to improve the intersection of Common Road with the Chichester Road.



## C Tabbil Creek

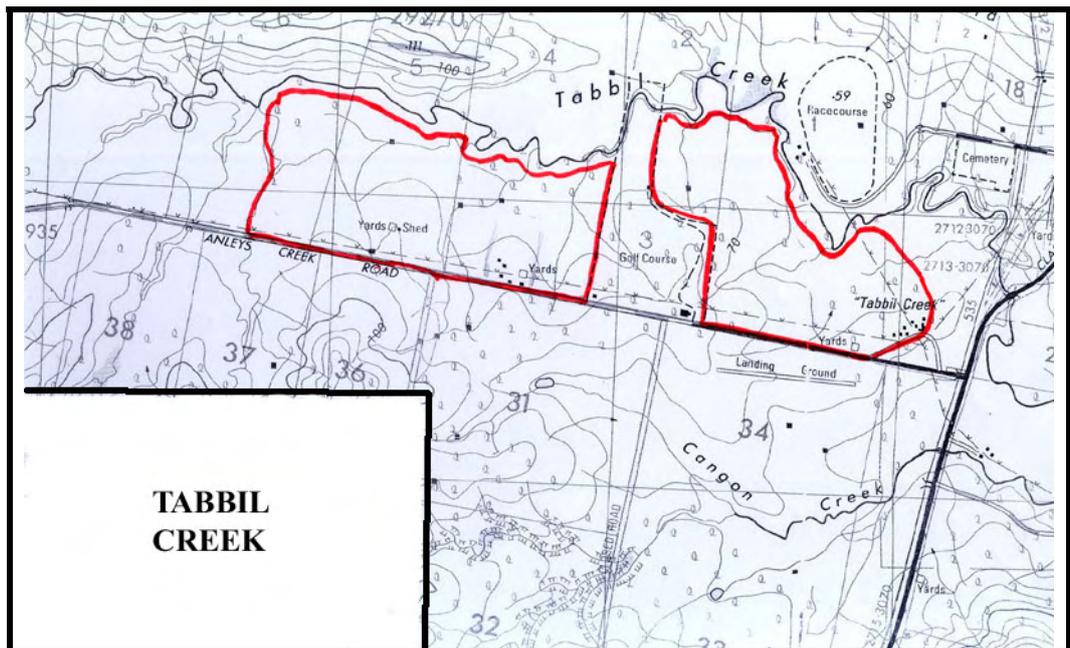
All of this land is proposed to be zoned 1(l) for Rural Lifestyle.

This has two areas on either side of Dungog Golf Club on Hanleys Creek Road some four kilometres south of the existing urban development.

Care needs to be taken to ensure that the development is shielded from Clarence Town Road from a landscape perspective. It is some 60 hectares in extent but if further development were to take place, there is land further to the west. The land is fragmented into seven parcels limiting its agricultural value.

Hanleys Creek Road would need to be upgraded, as would access over the main water pipeline and the intersection with Clarence Town Road, which would also be of advantage to the golf club.

Whilst a little distant from Dungog, the golf club will offer a nucleus of services and if the proposed village across the road comes into being, local services will be increased.



D Cangon Creek

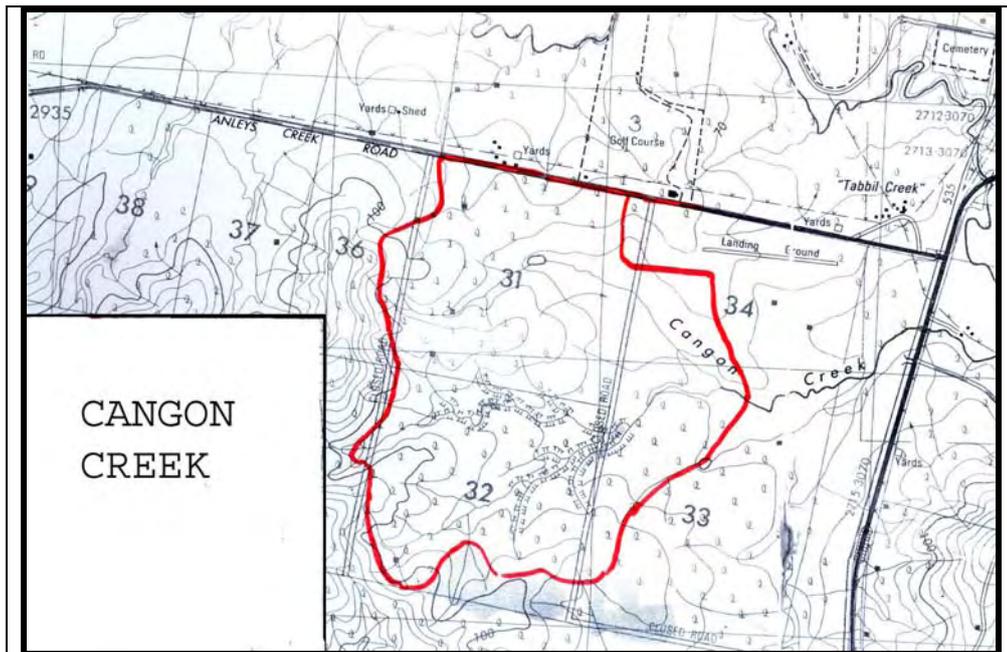
Most of this land is proposed to be zoned 1(l) for Rural Lifestyle, but with Village zone opposite the golf club.

It is on the southern side of Hanleys Creek Road some four kilometres south of the existing urban development.

Care needs to be taken to ensure that the development is shielded from Clarence Town Road from a landscape perspective.

It is some 150 hectares in extent but if further development were to take place, it might expand eastwards depending on how effective the is the screening from the Clarence Town Road. The land is still owned as a single parcel but approval had been granted to subdivide it five parcels limiting its agricultural value.

The owners plan an equestrian estate with conference centre and associated uses.

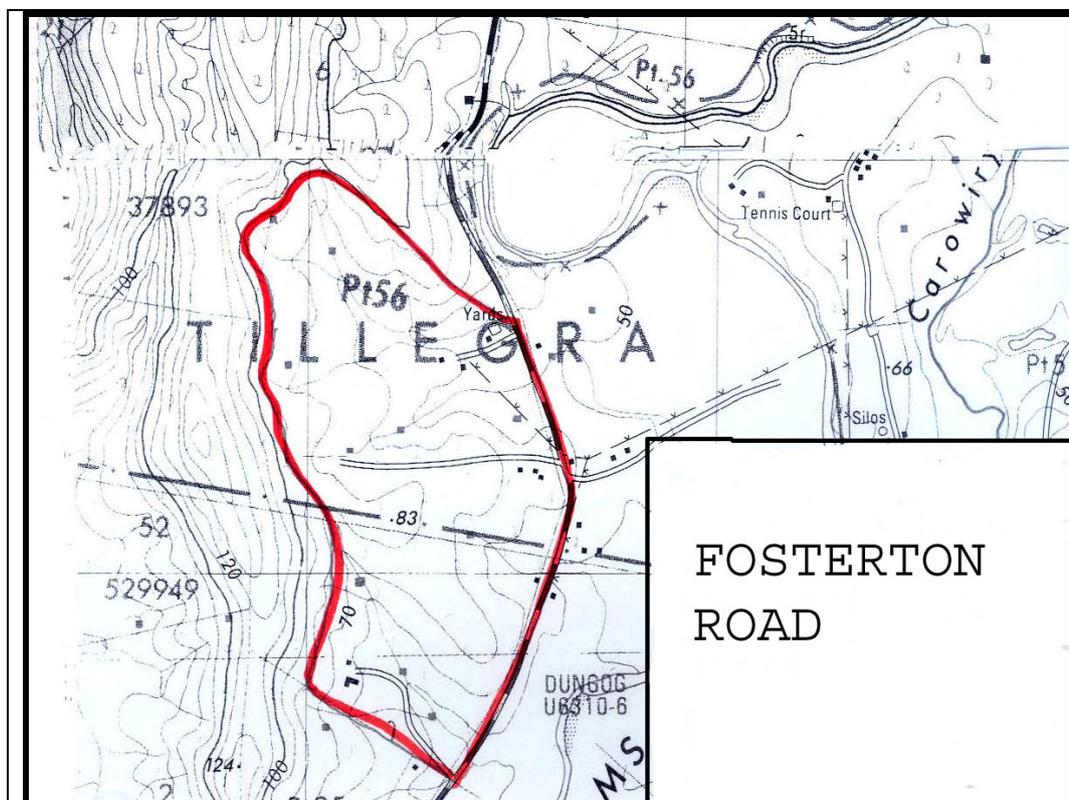


## E Fosterton Road

This site has been evaluated and included for zoning 1(l) Rural Lifestyle because any potential future residential development would exacerbate the difficult access to Stroud Road.

This is an area on the west side of Fosterton Road immediately north of the existing urban development. A prominent ridge marks the northern boundary. It has views over the Williams River but, with landscaping, can be relatively hidden from Fosterton Road.

It is some 60 hectares in extent. The land is fragmented into five parcels limiting its agricultural value. It is close to urban services and access off Fosterton Road is relatively easy. However, the road, and particularly its intersection with the Stroud Road would need upgrading.

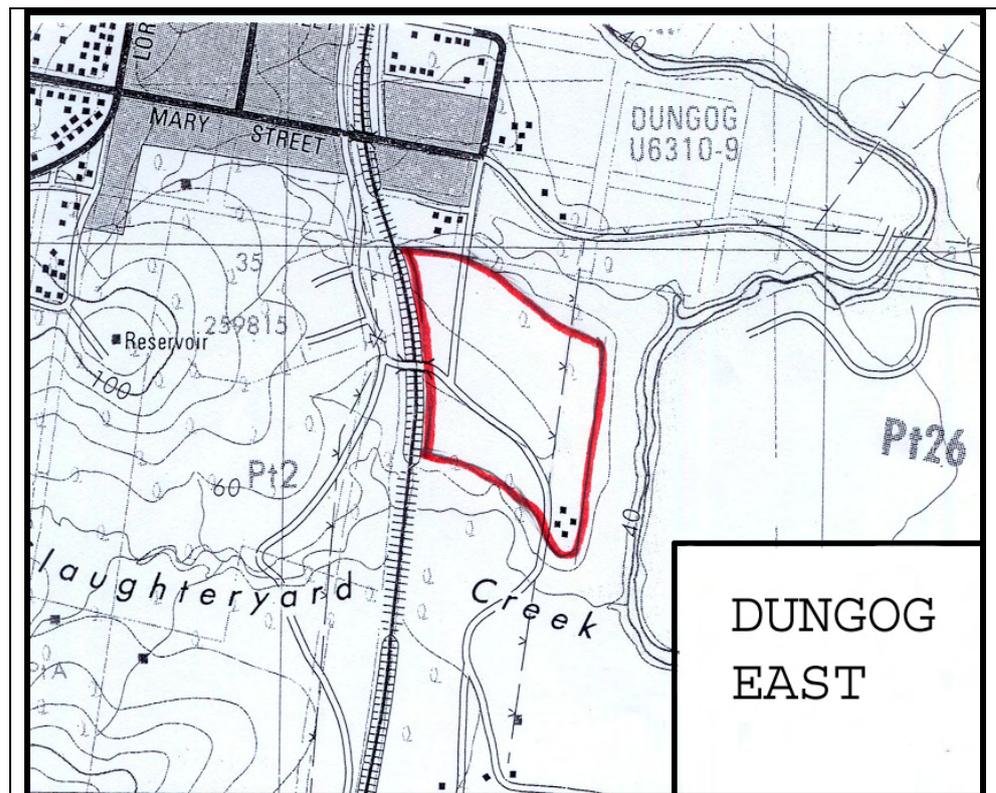


## F     Dungog East

This is a relatively isolated flood free area between the railway and the Williams River. It is remote from housing yet close to the town and as such, it would be suitable for a Rural Enterprise zone. There is little or no native vegetation on the site and is restricted to an area at least 100 metres from the river.

Whilst in one ownership, it is only ten hectares in extent so only it is only likely that between five and ten lots could be developed.

Access could be either via Verge Street or Baird Street. The limited potential means that additional traffic flows will be low.



## G Sugarloaf Road

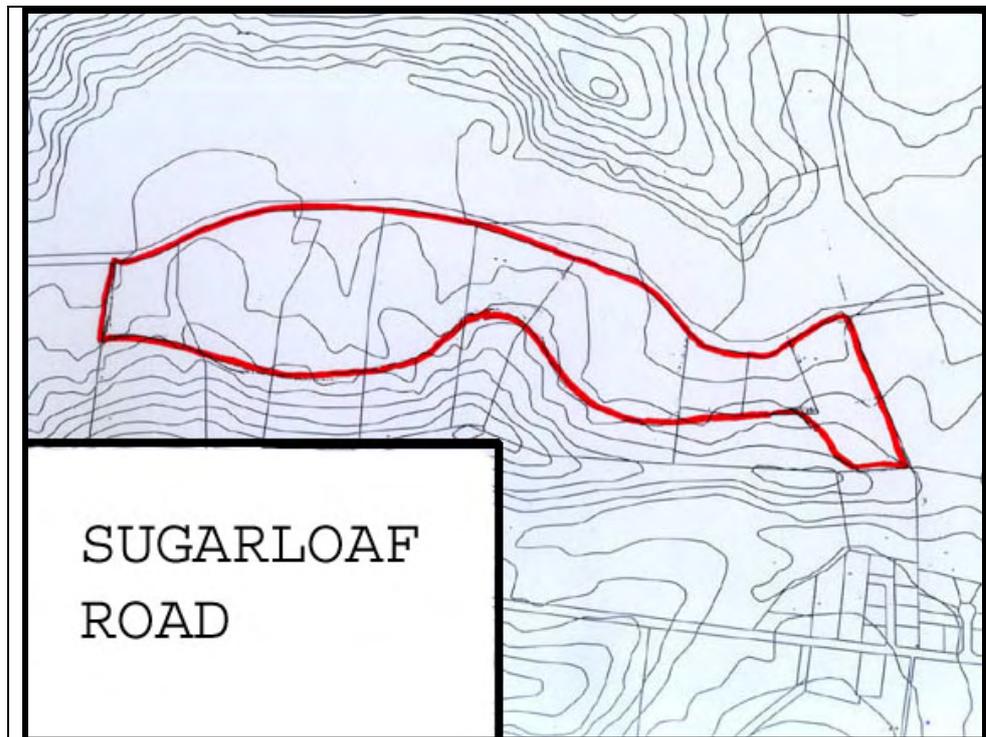
This site has been evaluated but rejected for zoning 1(l) Rural Lifestyle because it is unlikely that many of the landowners would choose to redevelop and no sites can be redeveloped on their own.

The area is on the south side of Sugarloaf Road immediately west of its junction with Chichester Road. Ridges mark the eastern and western boundaries. With landscaping, can be relatively hidden from Sugarloaf Road.

It is some 40 hectares in extent and has already been subdivided into 5 hectares parcels. This fragmented limits its agricultural value but also makes redevelopment difficult.

It is close to urban services being less than a kilometre north of the existing urban development. Access to Sugarloaf Road will need to be limited and shared.

The steeper land to the south of the area, much of it within the existing lots, includes some timber.



## YIELD

Precinct	Zone	Location	Hectares	Approximate potential dwellings
Precinct A	1 (l)	Blackboy Creek	100	75
Precinct B	1 (e)	Common Road	15	5
Precinct C	1 (l)	Tabbil Creek	60	45
Precinct D	1 (l)	Cangon Creek	150	115
Precinct E	1 (l)	Fosterton Road	60	45
Precinct F	1 (e)	Dungog East	10	5
Precinct G	1 (l)	Sugarloaf Road	40	0
Total			395	290
Estimated demand				250-350

### Note

The estimates assume an average of a dwelling per 1.3 hectares in 1 (l) zone, because owners have a choice of land title for their subdivisions giving a variation in average lot size of between 1.0 and 1.5 hectares. At Common Creek useable land is limited.

### Conclusion

The area surrounding Dungog is not readily conducive to the introduction of rural residential development. Proposals restrict development to three areas, one north-west, one north-east and a larger one south of Dungog. All these areas could possibly be expanded if demand exceeds expectations as it might, given past local restrictions and the drying up of opportunities in areas closer to Newcastle.

# STATUTORY

## Section 117 Directions

Conformity            The proposal will not affect the substantial provisions of the principal Local Environmental Plan so that most Section 117 Directions do not apply. Specifically the proposals comply with the provisions of:

- 2.1 Environmental Protection Zones;
- 2.3 Heritage Conservation;
- 3.2 Caravan Parks;
- 4.1 Acid Sulfate Soils;
- 4.2 Mine Subsidence;
- 4.3 Flood Prone Land;
- 4.4 Planning for Bushfire Protection; and
- 4.5 Approval and Referral Requirements.

However, there are four Section 117 Directions which will directly impact on the proposals.

### Direction No 1.2 – Rural Zones

Application            It is proposed to re-zone certain lands from Rural 1 (a) to Rural Residential, Rural Enterprise or Village. The lands are currently used for agricultural purposes. The proposal has the support of the Department of Primary Industry.

In these circumstances the draft LEP must not:

- (a) not re-zone land from a rural zone to and urban zone;

nor

(b) increase the permissible density of land.

unless they are justified by a strategy which:

- (i) gives consideration to the objective of the Direction which is to protect the agricultural production value of rural land,
- (ii) identifies the land which is the subject of the draft LEP,
- (iii) is approved by the Director-General of the Department of Planning.

The overall protection of the agricultural production value of rural land has been addressed in the new overall Dungog Strategy Plan for the Shire. It is to be noted that less than 0.5% of productive land is affected by the proposal and, given the equestrian focus of much of it, any loss in productive value is likely to be minimal.

Consistency        The proposal can be consistent with this Direction.

### Direction 1.3 – Mining, Petroleum and Extractive Industries

Requirement        This Direction applies when it is proposed to prepare a draft Local Environmental Plan which prohibits mining or quarries or could inhibit their use. The Dungog Local Environmental Plan 2006 prohibits these in all but Rural Zones, but restricts development near them. The Direction requires consultation with the Department of Primary Industry and for the Director-General of that Department to be given a copy of the draft LEP and afforded the opportunity to object.

Consultation        The Department of Primary Industry has been consulted in the course of this study and will be formally consulted at the Section 62 stage. No mineral resources have been identified.

Conformity        The proposal can be consistent with this Direction.

## **State Environmental Planning Policies**

Requirement            There are no State Environmental Planning Policies which directly impinge on the proposals. In any event most policies relate to development proposals, which will be assessed against their provisions, as and when they are submitted.

## **Regional Plans**

### **Hunter Regional Plan**

Requirement            Clause 26 (6) of the Hunter Regional Plan provides that a draft local environmental plan to provide for small rural holdings should be prepared only after the council has considered:

- (a) demand for such holdings,
- (b) accessibility to community facilities and services,
- (c) proximity to urban centres,
- (d) provision of infrastructure and services,
- (e) the risk of hazards,
- (f) land capability and agricultural suitability, and
- (g) the control of noxious weeds and animals.

Conformity            These issues were considered in the Dungog Strategy, and in this Environmental Study, which has led to the designation of these area as those potentially suitable for subdivision into small rural holdings.

## Williams River Catchment Regional Environmental Plan

**Objectives** The objectives of this Plan include promoting the:

- (a) sustainable use of land, water, vegetation and other natural resources in the Williams River catchment; and
- (b) the protection and improvements of the environmental quality of the catchment.

**Requirements** Under the REP, “the Council must not grant consent to the carrying out of development on land covered by this plan unless the Council is of the opinion that the carrying out of the development will not have a significant adverse effect on the water quality of any watercourse”.

**Conformity** These issues were considered in the Dungog Strategy and refined as part of this Environmental Study. The areas selected for development into small rural holdings are considered to be such that the existing control requirements to protect water quality and other qualities of the environment, can accommodate proposals.

## Conclusions

This study has identified land which it is clear could be developed, provided further detailed studies are carried out at development application stage.

The proposals will be backed up by the introduction of a detailed Local Area Plan (Development Control Plan) specifying a raft of controls for individual sites.

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